PWS-770

NEW

10.4" Rugged Tablet PC with Intel Atom N2600 Processor

Features

- 10.4" XGA LED panel, WAV transflective-LCD, high brightness 300 cd/m^2
- Hot swap, high capacity Li-ion battery provides 8 hours of operation(*1)
- Rich array of I/O ports supports a variety of applications
- IP54-certified, 4ft drop rating from 120 cm
- Complete communication: Wi-Fi/Bluetooth/GPS/WWAN (3.75G)
- Optional data capture modules: 1D/ 2D barcode scanner / MSR / RFID
- Lightweight, 1.2 kg

IP54 4ft

CE FCC

Introduction

The PWS-770 is a Rugged mobile tablet PC featuring a 10.4" XGA resolution TFT LCD panel and an Intel Atom N2600 1.6 GHz processor. It comes with 802.11 b/g/n WiFi, Bluetooth 4.0, a 2M pixel camera. It also has built-in optional GPS and WWAN 3.75G antenna. PWS-770 optional devices include an RFID module with antenna, a 1D/2D barcode scanner and an MSR card reader. PWS-770 is a fully functional communication device suitable for any outdoor application. It carries an IP54 rating for protection against dirt, dust and water. PWS-770 can also survive a 4-foot drop. Advantech's PWS-770 is a strong tablet PC for industrial and commercial use in any environment.

Specifications

Motherboard	CPU	Intel Atom N2600/1.6 GHz	
	Chipsets	Intel NM10	
	Memory	SODIMM DDRIII to 2 GB	
	Storage	Supports mSATA SSD 32 GB ~ 128 GB	
Display & Touchscreen	Display	10.4" XGA (1024 x 768) (Transflective) LCD 300 cd/m^2 LED back light	
	Touch Panel	4-wire resistive touch panel	
System	Wireless Communication	802.11b/g/n WLAN built-in with integrated antenna Bluetooth class 2, 4.0 built-in with integrated antenna GPS (u-blox 6; 50-channel; support GALILEO); WWAN (Cinterion PH8)	
	Camera	CMOS 2.0M pixel Camera module	
	Security	1. Password security 2. TTPM 1.2 (Optional)	
	Application Buttons	Power button x 1 Function keys x 3 (F1~F3) Tablet PC keyboard x 1 Mode key x 1	Enter key x 1 Activate key x 2 (S1 & S2): Activate barcode reader, camera & dimming adjustment required to control the brightness
	LED Status Indicator	Power LED (Green/Yellow) x1 Storage LED (Green) x1	WLAN LED (Green) x1
	I/O Interfaces	USB 2.0 x 2 Serial port RS-232 x 1 VGA port x 1 Audio in jack x 1 Audio out jack x 1	Internal mono microphone x 1 DC-in x 1 Docking port (32-pin; USB/PCIE/DC) SIM slot (with WWAN option)
	Audio Output	1 Watt speaker x 2	
	Expansion Port	SD memory card x 1 (SD 2.0/SDHC)	
	Battery	Internal battery: 3S1P 11.1V 1900 mAhr Hot-Swap External Battery: 11.1V 3760/5000mAh (Optional)	
	Power Adapter	AC Adapter: AC 100V-240V 50/60Hz, 19V/3.42A/65W, Auto Sensing/Switching worldwide power supply Car Adapter: AC120V-320V (Optional)	
	OS Support	Windows 7 Professional /Embedded	
Optional Devices	Data Collection	CMOS 2.0M pixel Camera module 1D/2D Barcode MSR; HF RFID	
Environmental Specifications	Temperature & Humidity	Operating Temperature: -10° C~ +50° C (Charge: 0° C ~ +40° C for the battery protection) Storage Temperature -20 to +60° C Operating Humidity 5% ~ 95% @ 40° C	
	IP Rating	IP54	
	Drop	4-foot drop onto Plywood, MIL-STD-810G 516.5 Precedure VI	

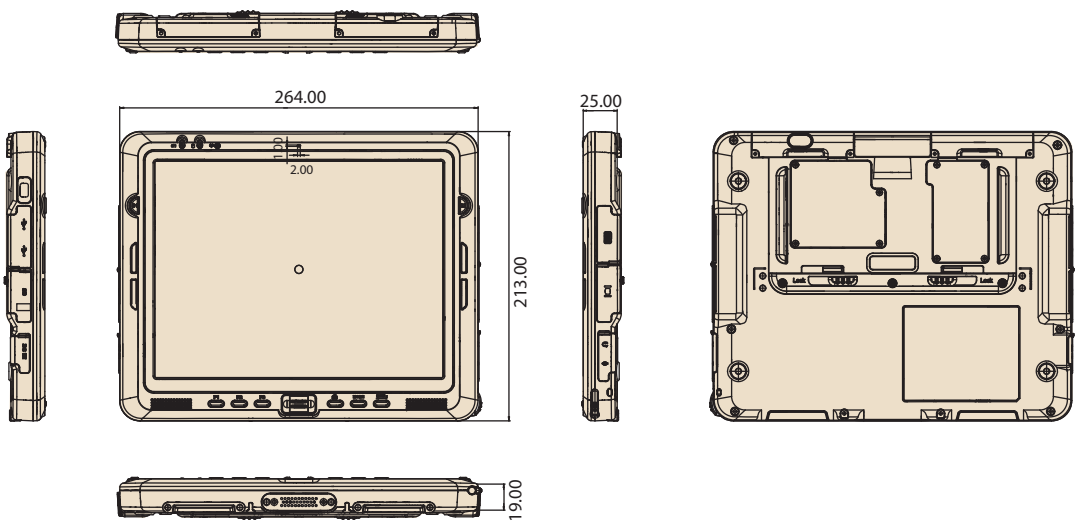
(1) - Internal battery + external 2nd battery 5000mAh in Battery Mark with maximum peripherals connected (Wi-Fi & BT enabled) the battery life up to 7.5hrs
- Internal battery + external 2nd battery 5000mAh idle with minimum peripherals connected in OS (Wi-Fi & BT disabled) the battery life up to 8.5 hrs

PWS-770

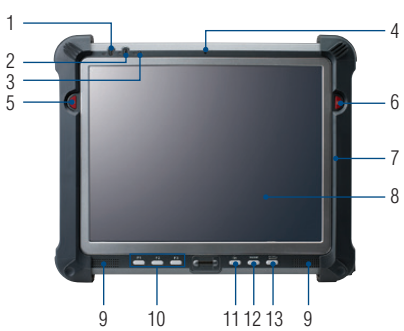
Certifications	EMC	CE/FCC/CCC/BSMI/C-Tick/PTCRB	
	Safety	UL/CE/CB/CCC	
Accessories	Accessories	AC adaptor (19V, 65W) Stylus (default) VESA Mounting Bracket Carrying Bag Car adapter DC10-32V 90W 18.5V 4.9A	Hand strap Desktop stand Desk Docking Vehicle cradle (Q3, 2013) 2nd battery
Dimensions & Weight	Dimensions	264 (L) x 213 (W) x 18 (H) mm	
	Weight	Under 1.2 kg without rubber bumper & optional devices	

Dimensions

Unit: mm



I/O



1. Power LED
2. Storage LED
3. WLAN LED
4. Microphone
5. Brightness button (Decrease brightness)
6. Brightness button (Increase brightness)
7. Rubber bumper
8. Touch-sensitive display
9. Speakers
10. Function keys
11. Keyboard button
12. Mode button
13. Enter button

1. Power button
2. USB ports (2)
3. SD card slot
4. DC-in jack
5. Serial port
6. VGA port
7. Headphone jack
8. Microphone jack

Ordering Information

Part Number	Description
PWS-770-N3A0EC001E	10.4 Normal N2600 RAM2G SSD32 WL BT Win7 EM
PWS-770-N3AWEC001E	10.4 Normal N2600 RAM2G SSD32 WL BT GPS 3G Win7 EM
PWS-770-S3A0PC001E	10.4 Sunlight N2600 RAM2G SSD32 WL BT Win7 PRO EN
PWS-770-S3AWPC001E	10.4 Sunlight N2600 RAM2G SSD32 WL BT GPS 3G Win7 PRO EN

Accessories

Part Number	Description
S10A-93-S10A6-011	VESA MOUNT M6 with packing
S10A-93-S10A6-021	VESA MOUNT M4 with packing
S10A-93-S10A1-001	Carrying bag
S10A-93-S10AA-002	Handstrap with packing Ver 2.0
S10A-93-S10A6-001	Stand with packing
1757002943	ADAPTER 100-240V 65W 19V 3.42A
9680014043	Car ADAPTER DC 10-32V 90W 18.5V 4.9A W/O PFC
PWS-770-BAT100E	PWS-770 2nd Battery (3760mAh)
PWS-770-BAT200E	PWS-770 2nd Battery (5000mAh)
PWS-770-Cradle00E	PWS-770 Desk Cradle
PWS-770-VCRADLE00E	PWS-770 Vehicle Docking (Q3, 2013)

Accessories

Modules for PWS-770 (for CTOS Only)

1D Barcode Scanner

- P/N: S10A-93-S10A2-015 (w/o camera)
  S10A-93-S10A2-011 (with 2.0M camera)
- SPEC:
  ZEBEX Z-5111 1D Imager
  LED Source: 617 visible LED
  Optical system: Linear CCD array
  Microprocessor: 32bit
  Depth of Field: 300mm
  Scan Angel: 43°
  Interface: USB
- Operating temp.: 0°C~50°C
- Dimensions: 75.3 x 44 x 34.2mm
- Weight: 35.5g

2D Barcode Scanner

- P/N: PWS-770-BAR200E (With 2.0M camera)
- SPEC:
  Intermac EA21 2D Imager
  Light Source: Highly visible white LED (Aimer 617 nm red LED)
  Optical resolution: 752 x 480 pixels
  Motion tolerance: 400 in/s
  Reads 1D & 2D matrix codes
  Ability to read damaged, poorly printed, and colored bar codes
  Scan Angle: 39° (Horizontal), 25.5° (Vertical)
  Interface: USB
  IP Rating: IP54
- Operating temp.: -10°C~50°C
- Dimensions: 75.3 x 50 x 38mm
- Weight: 40g

MSR (Magnetic Card Reader)

- P/N: S10A-93-S10A2-012
- SPEC:
  GIGATEK MSR170
  43mm Magnetic stripe swipe card
  Standard: ISO 7810, 7811
  Decoding method: ISO TK1,2, &3
- Dimensions:75.3 x 49 x 31.5mm
- Weight: 40g

2.0M Camera

- P/N: S10A-93-S10A2-010
- SPEC:
  Fangtec EM5020B
  Image resolution: 1600(H) x 1200(V)
  Compliant to USB Video Class
  CMOS sensor
  IP54, 3ft drop
- Operating temp.: -10°C~50°C
- Dimensions: 75.3 x 19 x 17.5mm
- Weight: 7.8g

5.0M Camera

- P/N: PWS-770-CCD200E
- SPEC:
  Fangtec AV5650A22
  Image resolution: 2592(H) x 1944(V)
  Compliant to USB Video Class
  CMOS sensor
  Supports Auto Focus Control
  Supports for LED Flashlight
  IP54, 3ft drop
- Operating temp.: -10°C~50°C
- Dimensions: 75.3 x 19 x 17.5mm
- Weight: 7.8g

HF RFID

- P/N: S10A-93-S10A2-014
- SPEC:
  REYAX RR1X
  Based on the RFID 13.56MHz protocol
  Supports Tag ICs: ISO1444A, ISO14443B, ISO15693,
  NFCIP-1, NFCIP-2
  IP Rating: IP54
- Operating temp.: -10°C~50°C
- Dimensions: 75.3 x 41 x 38.8mm
- Weight: 32.2g

Accessories for PWS-770

Carry Bag

- P/N: S10A-93-S10A1-001
- Material: PVC
- Color: Black
- Dimensions: 265 x 230 x 30mm

Hand Strap

- P/N: S10A-93-S10AA-002
- Material: PVC
- Color: Black
- Dimensions: 245 x 175 x 10mm
- Weight: 85g

External Battery

- P/N: PWS-770-BAT100E (11.1V 3760mAh)
  - IP rating: IP54 With Device
  - Dimensions: 181.8 x 87.6 x 18.8mm
  - Weight: 325g
- P/N: PWS-770-BAT200E (11.1V 5000mAh)
  - IP rating: IP54 With Device
  - Dimensions: 181.8 x 87.6 x 26.8mm
  - Weight: 382g

Stand

- P/N: S10A-93-S10A6-001
- Material: SECC + Rubber
- Angle: 0~75 degree angle
- Dimensions: 207 x 117 x 12mm
- Weight: 100g

VESA Mount

- P/N: S10A-93-S10A6-011 (M6)
- P/N: S10A-93-S10A6-021 (M4)
- Material: SPCC
- Color: Black
- Dimensions: 176 x 237 x 19mm

Car Adapter (Lab. testing)

- P/N: 9680014043
- 90W Max. Continuous Output Power
- Input 10V ~ 32V
- Output 18.5V +~ 5%
- Input power 110W max at continuous load
- Operating Temp: -20 ~ 70° C (for 66% Load), -20 ~ 40° C (for any condition)
- 4.6" × 2.1" × 1.3" Package Size
- Built-in EMC Filter
- CE, FCC, UL, CB, C-Tick, E-Mark Certificated

Accessories

PWS-770 Office Docking Station

Features

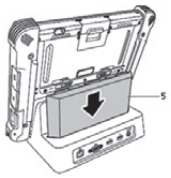
- Offers complete port replication for PWS-770
- Second battery charger
- Operating temperature -20° C to 60° C

Introduction

The docking stand is designed to dock PWS-770 tablet when you are at your home or on your office desk. When docked, you can charge both the internal and external batteries or transfer data from your tablet PC to another PC.

Product Specifications

Feature	Description
Product Name	PWS-770 Tablet PC Docking
External I/O Interfaces	One LAN port One RS-232 Two USB 2.0 host connectors Battery Charger for 2nd battery 11.1V 5000mAh & 3760mAh One DC-in (19 V +- 5%)
Power Adapter	AC Input 100~240V_{AC}, 1.5A 50~60Hz; DC Output 19V,3.42A
Environment	Operating Temperature -20° C to 60° C Storage Temperature -40° C to 70° C Operating Humidity 10% ~ 95%
Certifications	CE, FCC
Physical Size	205 x 150 x 98 mm



No.	Component	Function
1	LAN port	Connect an RJ-45 cable to access LAN connection
2	Serial port	Connect a serial cable to connect to another PC
3	USB ports	Connect USB connectors to transfer data
4	DC-IN	Connect the AC adapter to charge the battery
5	Charger	Battery Charger for 2nd battery

Note: In order to prevent the damage to both PWS-770 and the docking station, please do not attempt to use with other tablets (For example: the previous model, S10A).

Ordering information

Part Number
PWS-770-Cradle00E

PWS-770 Vehicle Docking Station

Features

- Implements GPS module inside
- Locking mechanism for theft deterrence
- Complement port replication
- Cable management
- Ignition control
- Shock and vibration absorption

Introduction

The PWS-770 high strength composite vehicle docking is designed to hold PWS-770 tablet with safety, security, and efficiency in mind. The docking station comes with a locking mechanism for theft deterrence. It offers offers complete port replication for users accessing audio jacks, USB, RS-232/RS-485, and LAN ports. One of the most important and unique design features is it implements a GPS module to enhance GPS positioning, locating, and tracking ability.

Product Specifications

Function	Item	Description
RF	GPS	U-blox 6 GPS module
IO connectors	RS-232	1 RS-232 (HDC)
	RS-485	1 x RS-485 (HDC)
	USB	2 x USB 2.0
	Ethernet	1 x 100/1000 LAN port (M12)
	Audio	1 x Line-in & 1x Line-out (HDC)
	DI / DO	2 x DI & 2x DO (HDC)
	SMA for GPS	1
IO connectors	DC in	1 x Power Jack (M12) 18.5 V ± 5%
	Ignition control	GPI (HDC)
Power	Car Adapter	Amperor ADP-90DC (Advantech P/N 9680014043 for evaluation only)

Environment	IP Rating	IP43
	Operating Temperature	-10 ~ 50° C (Charge: 0 ~ 40° C) with tablet
	Storage Temperature	-40 ~ 85° C
	Vibration/Shock	MIL-STD-810G, Method 516.5; SAE J1455
	EMC	CE, FCC
	Safety	UL, CB
	Vehicle-related	E-mark
Mounting	Mounting Way	VESA
Weight		775g
Dimension:		204.98 x 276.99 x 85.8 mm

Ordering Information

Part Number
PWS-770-VCRADLE00E